



Original research article

# Impact of mindfulness and coping strategies on the well-being of hospice workers in Slovakia during the Covid-19 pandemic

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## Abstract

**Background:** Working in hospice facilities is very difficult both physically and mentally. Workers are often confronted with difficult and borderline living situations, and the burden of the Covid-19 pandemic has now been added to the equation. It is essential to look for factors that increase the resilience of these workers and support their well-being.

**Purpose:** The aim of this paper is to create a model of impact of mindfulness and coping strategies on the well-being of hospice workers in Slovakia.

**Results:** Mindfulness correlated with negative coping strategies. The multiple regression model indicated that the combined effect of mindfulness, negative coping strategies, and positive control strategies explain the 39% variance in well-being. The negative coping strategies and control strategies mediated the relationship between mindfulness and well-being.

**Conclusions:** Mindfulness contributes to the well-being of hospice staff both directly and indirectly through negative coping strategies and positive strategies (control). Mindful individuals are less inclined to use negative strategies and, on the contrary, they are more prone to use positive coping strategies (particularly the control strategies). Implications for hospice providers are discussed.

**Keywords:** Coping strategies; Covid-19; Hospice staff; Mindfulness; Negative coping strategies; Positive coping strategies; Well-being

## Introduction

Working in hospice care facilities is very demanding both physically and mentally. Workers are often confronted with difficult and borderline living situations such as death, suffering, loss of purpose in life, moral dilemmas, etc. They are also highly at risk of burn-out syndrome, compassion fatigue, and secondary traumatic stress (O'Mahony et al., 2016). In addition, another major stress factor currently associated with their work is the Covid-19 pandemic, which has resulted in a growing incidence of neurotic and depressive symptoms worldwide (Montemurro, 2020; Wang et al., 2020). Given the nature of clients in the hospice facilities, this causes an increased rate of death and a constant risk of infection, either of staff or the clients.

The question is how the hospice care workers can effectively deal with stress and maintain adequate well-being. In recent years, the attention of researchers has been focused on mindfulness. This appears to be an effective way to cope with stress, a safeguard factor helping people to deal more effectively with difficult living situations, and a way to promote mental and physical health and well-being.

## Mindfulness in the context of coping strategies and well-being

Mindfulness can be defined as the non-assessing observation of the continuous current of internal and external stimuli as they arise and arrive (Baer, 2006). It is open, unbiased, non-evaluational, impartial, and involves simply registering and accepting every recorded fact (Benda, 2007, 2010). Mindful individuals are oriented to the current events and experiences in a sensitive and attentive manner (Weinstein et al., 2009).

Mindfulness can be seen on two planes: as a disposition/feature of personality, and as a condition that can be induced, e.g., by training, meditation, etc. Empirical research into dispositional mindfulness, experimentally induced states of mindfulness and training programs on mindfulness has shown that this attribute is related to, or presupposes, several indicators of mental health and well-being (Weinstein et al., 2009). The meta-analyses of studies by Altinyelken et al. (2019) and Meiklejohn et al. (2012) found that the training of mindfulness led to a decrease in levels of anxiety and stress among university students, as well as to an improvement in academic skills, social skills, emotional regulation, self-esteem

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and mood, and an overall improvement in working memory and attention. The development of this skill is usually the service of counseling centers at some higher education institutions (Markovič, 2015). Other studies have also pointed to similar positive effects on mental health and well-being, e.g., Dvořáková et al. (2017), Greeson et al. (2014), Mak et al. (2017), O'Driscoll et al. (2017). Allen et al. (2015) conducted a meta-analysis of studies related to the impact of mindfulness training in different working areas. They concluded that mindfulness can be effective in reducing staff stress, increasing performance and employee involvement. The next systematic review findings provided further evidence that mindfulness-based stress reduction programmes were effective in improving particular aspects of psychological functioning in different types of healthcare professionals, including reducing anxiety, depression, and stress, and increasing self-compassion. These findings supported theories that mindfulness can generate a positive shift in perspective and an ability to view one's life experiences more objectively (Kriakous et al., 2021). The positive effects of mindfulness training have been identified across research related to various helping professions, for example teachers (Klingbeil and Renshaw, 2018), healthcare professionals – doctors (Scheepers et al., 2019), nurses (Ghawadra et al., 2020; Penque, 2019), practicing psychologists (Eriksson et al., 2018), and Hospice care professionals (Hotchkiss, 2018).

On the one hand, mindfulness can be seen as a condition that can be trained, and on the other hand, it can be viewed as a personal disposition/trait that each individual is endowed with to varying degree. Individuals with a high degree of dispositional/trait mindfulness are very often and easily mindfully conscious (Dillard and Meier, 2021). This mindfulness trait has a positive impact on various aspects of mental and physical health, as can be seen in several studies, e.g., Barajas and Garra (2014), Islam and Siddique (2016), Ma and Fung-ying Siu (2019), Murphy et al. (2012).

In summary, we can conclude that mindfulness and well-being are linked. However, as stated by Weinstein et al. (2009), research attention should be paid to the processes through which mindfulness has beneficial effects on well-being. According to the above-mentioned authors, there are two main ways in which mindfulness can support well-being. Firstly, mindfulness can encourage a less defensive and more active exposure to challenging and stressful events and experiences, which can reduce the negative cognitive assessment of these situations, thereby reducing the level of perceived stress. Secondly, mindfulness can support the increased ability to adaptively deal with situations that are perceived as difficult, threatening, and stressful. In this context, mindfulness is linked to a lower tendency to evaluate or interpret the events as stressful, as well as to a more adaptive coping with stress situations. This implies that one of the ways in which mindfulness can provide benefits in the field of mental health is the more effective processing of stressful events, as is confirmed by research, in which it was found that mindful individuals are better able to cope with stressors (e.g., Allen et al., 2015; Greeson et al., 2014; Jensen et al., 2016; Kriakous et al., 2021).

Coping strategies are considered to be adaptive when efforts are directed toward addressing or overcoming the stressful situations associated with them. As a result, these strategies are expected to facilitate assimilation and adjustment to stress in a way that ultimately increases our well-being (Weinstein et al., 2009). There is a theoretical basis for the hypothesis that mindfulness promotes adaptive (less evasive, more active) coping. In particular, if the mindful individuals are able

or willing to objectively observe internal events, ideas and emotions when they occur, instead of engaging in negative or distorted patterns of past- or future-oriented thinking (e.g., rumination, anticipation of disasters), they are more likely to respond by adapting themselves rather than by maintaining or increasing stress (McCullough et al., 2007). Several studies have identified positive relationships between dispositional awareness and adaptive coping strategies, and negative relationships with maladaptive coping strategies (de Vibe et al., 2018; Dillard and Meier, 2021; Palmer and Rodger, 2009; Wu and Buchanan, 2019). Weinstein et al. (2009) found that adaptive stress responses partly mediated the relationship between mindfulness and well-being. Given the key role of cognitive evaluation of stressful situations, we assume that one of the ways in which mindfulness can improve mental health and well-being is the reduced tendency to perceive the situations in ways that cause and increase stress. In this context, the aim of this research is to find out whether mindfulness helps to promote well-being through the use of adaptive coping strategies. With this in mind, we have formulated the following research objectives:

1. Identify the link between mindfulness, well-being, and coping strategies.
2. Identify the impact of mindfulness and coping strategies on the well-being of hospice staff.
3. To find out if coping strategies mediate the relationship between mindfulness and well-being (based on studies by McCullough et al., 2007; Weinstein et al., 2009).

## Materials and methods

### Research method

The SVF questionnaire (Stressverarbeitungsfrage, Stress-Coping-Questionnaire) by Janke and von Erdmann (1997) was translated and modified into the Slovak socio-cultural environment by Švancara (Janke and von Erdmann, 2003). It is a multi-dimensional self-observational battery that allows us to identify the multiple ways an individual develops and uses in handling and processing stress situations. It allows us to analyze the stress reduction strategies (these are classed as positive strategies) or stress escalation strategies (these belong to negative strategies). It consists of 79 items (5-point Likert scale), which are grouped into two main factors (secondary factors) consisting of 13 subtests (primary factors) as follows:

Positive strategies are classified into three sub-areas:

- Guilt undervaluation and devaluation strategy – includes guilt undervaluation (e.g., “*I can deal with it faster than others*” and rejection (e.g., “*I say I have nothing to regret*”).
- Diversion strategy – consists of diversion (e.g., “*I’ll get down to work*”) and substitute satisfaction (“*I’ll watch a good movie*”).
- Control strategy – consists of situation control (“*I’ll develop a plan to eliminate these difficulties*”), response control (“*I won’t get upset*”), and positive self-instruction (“*I’ll survive*”).

Negative strategies consist of the following subscales: escape tendency (“*I want to escape*”), perseverance (“*I’m thinking about the situation again and again*”), resignation (“*I tend to give up*”), and self-blame (“*What did I do wrong again?*”).

In our research, the reliability of the primary subscales ranged from  $\alpha = 0.690$  to  $\alpha = 0.870$  (diversion and response control were the only subscales with a lower reliability

$\alpha = 0.549$ ,  $\alpha = 0.534$ ). The secondary factors were adequately reliable: the guilt undervaluation and devaluation strategy was at  $\alpha = 0.837$ , the diversion strategy at  $\alpha = 0.756$ , control strategy at  $\alpha = 0.812$ , and negative strategies at  $\alpha = 0.904$ .

The MAAS (*Mindful Attention Awareness Scale*) is a 15-item scale aimed at identifying the individual differences in mindfulness (e.g., “*I tend not to notice feelings of physical tension or discomfort until they really grab my attention.*”). The responses are placed on a 6-point Likert scale. The MAAS scale was developed by Brown and Ryan (2003), and the questionnaire aims to measure dispositional observation based on the premise that some individuals are more prone to be mindful than others (Brown and Ryan, 2003). The reliability of our research was  $\alpha = 0.916$ .

The WHO-5 Well-Being Index is a short questionnaire consisting of 5 simple and non-invasive questions, which tap into the subjective well-being of the respondents. The items are measured on a 6-point Likert scale (e.g., “*I have felt active and vigorous.*”). We used the WHO-5 Well-Being Index (1998), which we translated into Slovak. The psychometric characteristics were assessed through meta-analysis by Topp et al. (2015). The above authors conclude that the scale has adequate validity, both as a screening tool for depression and as an outcome measure in clinical trials. It has been applied successfully across a wide range of study field-sensitive and specific screening tools for depression and its applicability across study fields is very high. The reliability of our research was  $\alpha = 0.908$ .

### Data processing methods

The data were processed in IBM SPSS, version 27. Correlation, regression, and path analysis were used for analysis. A path analysis is a multiple-regression statistical analysis, which is used to evaluate causal models by examining the relationship between a dependent variable and two or more independent variables. This method is used to estimate the size and significance of causal links between variables (Cole, 2019).

### Sample

The sample consisted of 110 respondents, 92 women (83.6%) and 18 men (16.4%). The mean age was 46.4 years (SD 10.67 years), the youngest respondent was 20 years old, the oldest 70 years old. The average duration of practice was 7.47 years (SD 6.54 years), the shortest duration was 1 year, the longest duration was 44 years. The following hospice staff employee types completed the questionnaire: doctor (N 10), nurse (N 45), medical assistant (N 23), social worker (N 9), psychologist (N 4), carer (12), director (N 3). 4 respondents did not provide an answer.

Secondary education prevailed in the sample (48.2%), followed by second-cycle university education (18%), first-cycle university education (13%), third-cycle university education (6.4%), and higher vocational education (7.3%); 11 respondents did not answer this question.

In terms of family status, the respondents were married (N 55.5%), single (24%), divorced (12%), living with a partner (9%), or widowed (4.5%). One respondent did not answer this question.

In terms of religion, Roman Catholic faith predominated, followed by Greek Catholic/Orthodox (9.1%), non-religious (8.2%), Lutheran (4.5%), and other Christian religions (2%). Most respondents (84.2%) practice their faith, 15.8% do not, and 9 did not respond.

### Method of conducting research

In total, there are 12 hospice facilities in Slovakia and 6 mobile hospices (population). All hospice facilities were contacted by e-mail to participate in the research, followed by phone calls to check whether they would participate in our research. The facilities that agreed were visited, and the staff members were asked to complete a battery of research tools (filling out the questionnaires took 15–25 minutes). Altogether 7 hospices and 4 mobile hospices agreed to participate.

The selection of the sample took the form of a criterion selection (the criterion was work in a hospice) and self-selection, since the respondents themselves undertook to fill in the online questionnaire. By completing the questionnaire, they agreed to participate in the research, and the anonymity of the respondents was maintained. This way, we collected a group of 110 respondents. Data collection took place between May–June 2021, during the Covid-19 pandemic.

The overall evaluation of the results of the questionnaires is not part of the presented study (Stefakova et al., 2021).

## Results

### Identify the link between mindfulness, well-being, and coping strategies

Table 1 shows the correlation matrix. Well-being only relates to the negative coping strategies in a strong, negative relationship ( $r = -0.537^{**}$ ). A more detailed analysis of the individual negative strategies shows that with the increasing rate of escape tendency ( $r = -0.274^{**}$ ), perseverance ( $r = -0.478^{**}$ ), resignation ( $r = -0.511^{**}$ ), and self-blame ( $r = -0.383^{**}$ ), the individual's well-being deteriorates. Although to a limited extent ( $r = 0.270^{**}$ ), well-being is positively affected by Underestimation, i.e., the more it is used, the better the individual's well-being.

Furthermore, the Table shows that mindfulness is positively linked to guilt underestimation and devaluation strategies ( $r = 0.207^{*}$ ), control strategies ( $r = 0.200^{*}$ ), and is in a moderately negative relationship ( $r = 0.415^{**}$ ) with negative strategies. If we look at the first order factors, we see that mindfulness positively correlates with Underestimation ( $r = 0.240^{*}$ ) and positive self-instruction ( $r = 0.326^{**}$ ). That is to say, mindful individuals are using these strategies to a greater extent. Mindfulness also correlates with negative strategies, i.e., perseverance ( $r = -0.329^{**}$ ), resignation ( $r = -0.456^{**}$ ), and self-blame ( $r = -0.404^{**}$ ), suggesting that mindful individuals use them to a lesser extent.

### Identify the impact of mindfulness and coping strategies on the well-being of hospice staff

The research objective is analyzed by regression analysis with the Enter method. Well-being is the independent variable, and the individual coping strategies and mindfulness are dependent variables.

Table 2 shows the resulting regression model, which shows that negative strategies and control strategies are significant predictors, predicting well-being in a negative direction, and mindfulness in a positive direction. The model explains almost 39% of the variance of the well-being variable (adj.  $R^2 = 0.386$ ). The strength of this prediction is moderate ( $R = 0.645$ ).

On the basis of the non-standardized coefficient B, we can determine the point change in the dependent variable – that

**Table 1. Correlation analysis – coping strategies, well-being, mindfulness**

	Well-being		N	Mindfulness		N
	<i>r</i>	<i>p</i>		<i>r</i>	<i>p</i>	
<b>Positive strategies</b>	-0.011	0.913	102	0.193	0.052	102
<b>Guilt undervaluation and devaluation</b>	0.125	0.211	102	0.207*	0.037	102
<b>Diversion strategy</b>	-0.068	0.500	102	-0.007	0.946	102
<b>Control strategy</b>	-0.076	0.449	102	0.200*	0.044	102
<b>Negative strategies</b>	-0.537**	0.000	102	-0.415**	0.000	102
Underestimation	0.270**	0.006	102	0.240*	0.015	102
Rejection of guilt	-0.054	0.592	102	0.123	0.218	102
Diversion	0.117	0.242	102	0.193	0.051	102
Substitute satisfaction	-0.167	0.093	102	-0.138	0.168	102
Situation control	-0.188	0.059	102	-0.016	0.873	102
Reaction control	-0.083	0.407	102	0.148	0.137	102
Positive self-instruction	0.096	0.339	102	0.326**	0.001	102
Escape tendency	-0.274**	0.005	102	-0.049	0.628	102
Perseverance	-0.478**	0.000	102	-0.329**	0.001	102
Resignation	-0.511**	0.000	102	-0.456**	0.000	102
Self-blame	-0.383**	0.000	102	-0.404**	0.000	102

Note: *r* = correlation coefficient; *p* = significance.

**Table 2. Regression model for well-being**

Well-being							
	<i>R</i>	<i>R</i> <sup>2</sup>	Adj. <i>R</i> <sup>2</sup>	<i>B</i>	$\beta$	<i>t</i>	<i>p</i>
Predictor							
<b>Negative strategies</b>				-0.575	-0.387	-4.297	<b>0.000</b>
Guilt undervaluation and devaluation				0.013	0.009	0.100	0.921
Diversion strategy	0.645	0.416	0.386	0.031	0.020	0.241	0.810
<b>Control strategy</b>				-0.332	-0.182	-1.998	<b>0.049</b>
<b>Mindfulness</b>				2.320	0.383	4.378	<b>0.000</b>

Note: *R* = multiple correlation coefficient, *R*<sup>2</sup> = % of variability of the dependent variable explained by independent variables, Adj. *R*<sup>2</sup> = *R*<sup>2</sup> adjusted on the basis of the number of variables, *B* = non-standardized regression coefficient, Beta = standardized regression coefficient.

is, how much its value changes if the independent variable is changed by 1 unit. This means that if the negative strategy score increases by one, well-being will drop by -0.75 points. And if control strategies are increased by one, well-being drops by -0.332 points, and if mindfulness increased by one, well-being increases by 2.320 points.

### Overall assessment of the model

Internet dependency ( $F = 13.683$ ,  $p < 0.001$ ,  $N = 102$ ).

### To find out if coping strategies mediate the relationship between mindfulness and well-being

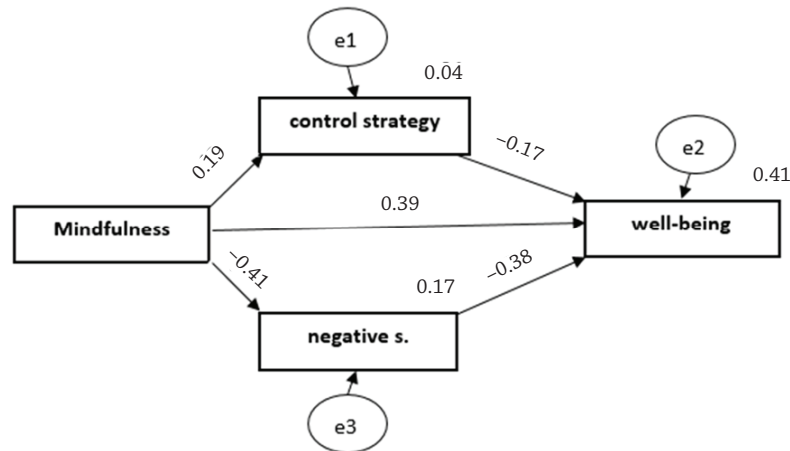
Based on the theoretical assumptions and assessment of significant well-being predictors, we constructed the model in Fig. 1. We used the Path analysis to examine how mindfulness and coping strategies are related to well-being in hospice workers. A direct pathway from mindfulness to well-being was tested, and since the coping strategies should act as a partial mediator between mindfulness and well-being, this pathway was also tested.

According to the chi-squared test results and several SEM criteria, which are commonly used to evaluate the model, the model was very well-suited to the data – see Table 3. A statistically insignificant chi-square confirmed that the test model cannot be rejected on the basis of data. All conformity indices measuring the conformity of the model (CFI, TLI) were above 0.95. RMSEA reached a great value.

The presented model achieved a relatively high explanatory force assessed by *R*<sup>2</sup> for well-being (0.41). The control strategies were only explained by mindfulness to a limited extent (0.04), followed by negative strategies (0.17).

The highest standardized regression weight was found between mindfulness and negative strategies (-0.41), and this relation was expected to be negative. Furthermore, an almost equally high regression weight was identified between negative strategies and well-being (-0.38), with a negative relationship between mindfulness and well-being (0.39). Overall, we found that negative coping strategies are a partial mediator between mindfulness and well-being.





**Fig. 1.** Path analysis – final model with standardized coefficients

**Table 3.** Fit indices of path analysis

Fit indices	$\chi^2$	df	p	CFI	TLI	RMSEA	Our model		Saturated model	
							BIC	AIC	BIC	BIC
Model	0.081	1	0.776	1.000	1.130	0.000	26.081	27.331	28.000	29.346

Note: CFI = Comparative Fit Index; TLI = Tucker-Lewis Index; RMSEA = Root Mean Square Error of Approximation; AIC = Akaike's Information Criteria; BIC = Bayes' Information Criteria.

Table 4 presents the estimates for specific standardized direct, indirect, and total causal effects of variables in the tested model. The direct pathway from negative strategies to well-being was higher than the direct pathway from control strategies to well-being. The pathway from mindfulness to well-being confirmed that the coping strategies are functioning as a partial mediator between mindfulness and well-being.

**Table 4.** Direct, indirect, and total effect

Path	Direct effect	Indirect effect	Total effect
Mindfulness (control strategy – negative strategy) – well-being	0.394	0.122	0.517
Control strategy – well-being	–0.169	0.000	–0.169
Negative strategies – well-being	–0.377	0.000	–0.377

## Discussion

The concept of mindfulness has been a relatively well-studied phenomenon in recent decades, particularly in the context of its impact on mental and physical health. Theoretical approaches and research studies have shown that mindfulness (both as disposition and as a condition) has a positive effect on mental health and improves well-being. Consideration is given to how mindfulness contributes to well-being and the mediation effect of stress-coping strategies is also investigated. In the present paper, we focus on hospice workers, whose work is of a stress-inducing nature, resulting from the need to face the ultimate questions (death, suffering, sickness, terminal stages, etc.). We consider it important to identify which factors can

help reduce the harmful effects of stressful events, focusing in particular on mindfulness and coping strategies. The paper discusses the question of whether mindfulness supports well-being by means of adaptive coping strategies in hospice workers. We have tried to find an answer to this question by formulating three research objectives.

Within our first objective, we established the relationships between mindfulness, well-being and coping strategies through a correlation analysis. We found that negative coping strategies, namely escape, perseverance, resignation, and self-blame, are negatively related to well-being. This means that the more they are used by the workers, the lower their well-being. These findings are in line with the Kato's meta-analysis (2015), which showed that the maladaptive strategies relate to low levels of well-being. Moreover, the quoted authors also mentioned the relationships between well-being and active strategies, which was not confirmed in our research. This inconsistency is probably due to the use of different methodologies (the COPE questionnaire was used in the analyzed studies).

We then identified the correlations between mindfulness and coping strategies. We found that mindfulness correlates with negative strategies, especially with perseverance, resignation, and self-blame. Mindfulness also correlates with positive strategies, namely guilt underestimation and devaluation, and with control strategies. These results are in line with the findings of de Vibe et al. (2018), Dillard and Meier (2021), Palmer and Rodger (2009), Wu and Buchanan (2019).

In our second objective, we have measured the impact of mindfulness and coping strategies on well-being by means of regression analysis. Significant predictors included negative strategies, control strategies (which are positive and active coping strategies), and mindfulness.

Based on the theoretical assumptions and impacts indicated in the regression analysis, we conducted the path analysis. Our third goal was to find out whether coping strategies me-

mediate the relationship between mindfulness and well-being. This resulted in a model that shows that mindfulness, negative strategies, and control strategies explain 41% of variance in well-being. Mindfulness has a direct impact on well-being. That is to say, individuals with a higher mindfulness as a personality trait achieve a higher level of well-being. In addition, we have identified the mediated impact of negative strategies. Higher dispositional mindfulness leads to a lower tendency to use negative strategies and thus affects well-being. Dispositional mindfulness also affects active strategies (although the impact is much lower compared to negative strategies). It also affects the well-being of workers. This finding is in line with Weinstein et al. (2009) who found that adaptive stress responses partly mediated the relationship between mindfulness and well-being.

Overall, the impact of mindfulness on well-being is both direct and mediated through negative strategies (escape, perseverance, resignation, self-blame) and, to a lesser extent, through active control strategies. Mindful individuals use negative coping strategies to a lesser extent than positive strategies. Both negative strategies and control strategies lead to a lower level of well-being. It may seem counterintuitive that a positive strategy has a negative impact on well-being, but if we consider the sources of control strategies and well-being, we find that activities such as "I think about my next action", "I will create a plan to eliminate the difficulties", "I am actively trying to change the situation", etc., negatively correlate with well-being (especially with the statements "I woke up rested", "I was calm and relaxed", etc.). It is understandably more difficult to be calm and relaxed if I think about a plan to solve the problem or manage the stress situation. However, it is an active form of solution, which in the long term has the potential to lead to a more constructive solution of the issue/problem than what the negative strategies can provide. The control strategies focus on efforts to gain control of the stress situation (e.g., planning, active intervention), and they are also focused on controlling the reactions (self-control) and positive self-instruction (self-encouraging). Furthermore, when addressing the problem, the active control strategy had a much lower negative impact on well-being than negative strategies.

Negative strategies, such as the escape tendency (a resignation tendency to escape from the stress situation), perseverance (rumination, inability to distance oneself from a stress situation), resignation (a feeling of helplessness and despair in relation to the possibilities to cope with the stress situation), and self-blame (attributing mistakes to own actions) reflect the tendencies to deploy unfavorable coping processing methods, which further exacerbate the stressful situations. It is understandable that individuals who are impartially aware of their mental state and reflect on their behavior patterns will be less inclined toward perseverance or self-blame, and/or are aware of these obsessive ideas and can knowingly correct them.

Our findings support the conclusion that mindfulness is related to coping strategies, while dispositional mindfulness has the potential to reduce the negative cognitive evaluation of stressful situations, thereby reducing the level of perceived stress. Mindfulness can be one of the protective factors in the field of mental health, which shows that more mindful individuals deal with stressors more effectively (Allen et al., 2015; Greeson et al., 2014b; Jensen et al., 2016; Kriakous et al., 2021).

Dispositional mindfulness and mindfulness training are factors that can help workers in the field of helping professions to reduce stress, alleviate burnout, and increase work engagement, well-being, empathy, and self-efficacy (Eriksson et al., 2018; Ghawadra et al., 2020; Hotchkiss, 2018; Klingbeil and Renshaw 2018; Kriakous et al., 2021; Penque, 2019; Scheepers et al., 2019). Our research also demonstrated the positive impact of mindfulness. Hospice employees who had a higher level of mindfulness and used more effective strategies for coping with stress achieved better mental well-being. For hospice care facilities, this can be important information on how to support the mental health of employees. It has the potential to affect not only their mental well-being, but indirectly the well-being of clients. The well-being of employees should be increased intentionally and continuously, because only healthy (physically and mentally) employees are productive and approach their work with vigor and enthusiasm. This has a beneficial effect on the end user, *i.e.*, the client. Proven interventions aimed at cultivating alertness can be an inspiration, such as, for example: mindfulness-based stress reduction (MBSR) (Kabat-Zinn, 2003), mindfulness-based cognitive therapy – MBCT (Benda, 2007), dialectical behavior therapy – DBT (Baer, 2006), acceptance and commitment therapy – ACT (Benda, 2007). According to controlled and uncontrolled studies, these had positive effects on reducing stress and increasing well-being in the short and long term (Grossman et al., 2004; Klingbeil and Renshaw, 2018; Kriakous et al., 2021). Working in hospice facilities is a high-stress profession. Mindfulness-based programs can help workers develop skills to manage stress and improve their health, increase overall attention, empathy, and presence with clients and families, and experience work satisfaction, serenity, and reduced job burnout. There are several qualified lecturers in the Czech and Slovak Republics who run courses in this area (especially MBSR).

### Limitations

Our study has several limitations. For example, it is mainly a research set that is not representative. Another limitation, inherent to the self-assessment scales, is the risk that the level of introspection may vary widely in the individual respondents, which is of course reflected in the subjective evaluation. Another risk is the possibility of distortion in terms of social desirability. A certain limitation is the impossibility of considering some important variables, such as the level of difficulty of the client and their family, and the specific organizational factors that may have influenced the results.

### Conclusions

Hospice work is bio-psycho-socially challenging. It is also a profession that is very necessary and important from a societal point of view. Therefore, it is important to explore which factors contribute to reducing stress and maintaining well-being. As our research has shown, one of the protective factors may be mindfulness.

### Ethical aspects and conflict of interests

The authors have no conflict of interests to declare.

## Vplyv všímavosti a stratégií zvládania záťaže na well-being hospicových pracovníkov na Slovensku počas pandémie COVID-19

### Súhrn

**Úvod:** Práca v zariadeniach hospicovej starostlivosti je z fyzického i psychického pohľadu veľmi náročná, pracovníci sú veľmi často konfrontovaní s náročnými a hraničnými životnými situáciami, v súčasnosti sa k tomu pridružila záťaž spojená s pandemiou COVID-19. Je nevyhnutné hľadať faktory, ktoré zvyšujú odolnosť pracovníkov a podporujú ich well-being.

**Cieľ:** Cieľom príspevku je vytvoriť model vplyvu všímavosti a stratégií zvládania záťaže na well-being pracovníkov hospicových zariadení na Slovensku.

**Výsledky:** Všímavosť korelovala s negatívnymi stratégiami zvládania záťaže. Z regresnej analýzy vyplynulo, že kombinovaný efekt všímavosti, negatívnych stratégií zvládania záťaže a pozitívnych stratégií kontroly vysvetľujú 39 % variancie well-being. Negatívne stratégie zvládania záťaže a stratégie kontroly sprostredkovali vzťah medzi všímavosťou a well-being.

**Záver:** Všímavosť prispieva k well-beingu pracovníkov hospicových zariadení priamo i sprostredkované prostredníctvom negatívnych stratégií zvládania záťaže a pozitívnych stratégií (kontroly). Všimavejší jedinci menej inklinujú k používaniu negatívnych stratégií a naopak viac k pozitívnym stratégiám zvládania záťaže (konkrétne stratégiám kontroly). O implikáciách pre oblasť hospicovej starostlivosti sa diskutuje.

**Kľúčové slová:** pracovníci hospicovej starostlivosti; stratégie zvládania záťaže; všímavosť; well-being

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